

OCCASIONAL PAPERS  
OF THE  
CALIFORNIA ACADEMY OF SCIENCES

No. 73, 4 pages, 1 figure.

June 6, 1969

A New Pipefish from the Virgin Islands,  
*Micrognathus dawsoni*

By

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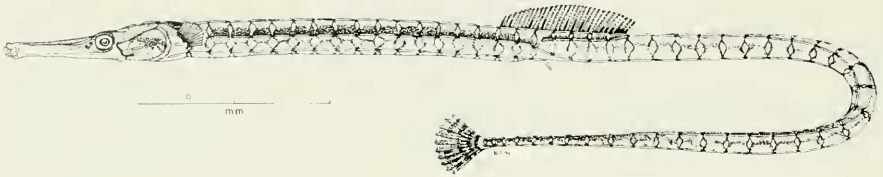
Twenty-five species of Atlantic American pipefishes have previously been recognized (Herald, 1965), and the addition of an intriguing new species from St. John brings the total to 26. It can be expected that deepwater pipefishes will be discovered in the future, but it is quite startling that this shallow water form should have escaped notice until this time.

The syngnathid genus *Micrognathus* is one of the intermediates on the evolutionary line believed to lead from the *Parasyngnathus*-type pipefishes with everted brood pouch closure (E-BPC) to the *Hippocampus*-type seahorse (Herald, 1959). There are 12 species in *Micrognathus*, four in the Atlantic including the new one described herein, and eight in the Pacific. Two subgenera are recognized: *Anarchopterus* Hubbs with only two species, both Atlantic, has smooth body ridges and lacks the anal fin. The subgenus *Micrognathus* Duncker with two Atlantic and eight Pacific species has sharp body ridges and does have the anal fin.

*Micrognathus* (*Micrognathus*) *dawsoni* Herald, new species.

HOLOTYPE. USNM 203148, female 134.5 mm. standard length (139 mm. total length); Fish Bay, St. John, U.S.V.I.; depth 5 feet, sand bottom with some *Thalassia* and scattered algae. Chemfish ichthyocide; 16 November 1966. C. E. Dawson and A. Damman, collectors.

DIAGNOSIS. Dorsal fin rays 30; pectoral 13-13; anal 3; caudal 10; dorsal fin covering 7 rings:  $2\frac{1}{2}$  trunk rings and  $\frac{1}{4}$  tail rings; trunk rings  $17\frac{1}{2}$ ; tail rings  $\frac{1}{2}35$  (see discussion below); snout 9.2 mm.; head 16.9 mm.; dorsal fin base 12.9 mm.; trunk 39.6 mm.; tail 78.0 mm.; pectoral base 1.7



*Micrognathus dawsoni* Herald, Holotype, USNM 203148,  
139 mm female; Fish Bay, St. John, U. S. V. I.

FIGURE 1. *Micrognathus dawsoni* Herald, new species.

mm.; pectoral length 2.3 mm.; head-in-standard length 7.95; snout-in-head 1.84; dorsal fin-base-in head 1.31; head-in-dorsal fin base 0.76; brood pouch details unknown; body ridge pattern typical of *Micrognathus*, i.e., lateral trunk ridge deflected ventrally at anal ring, then continuous with inferior tail ridge; superior tail ridge deflected ventrally at dorsal fin becoming lateral tail ridge, and ending free at anal ring. Belly flat. Color: light tan; slightly darker above lateral trunk ridge; scutella dark-rimmed; caudal dark.

**DESCRIPTION.** Median snout ridge smooth, beginning at interorbital area and extending forward one-half length of snout. Superior ocular ridge extends forward for one-half eye diameter, and posteriorly one-third of an eye diameter. Mid opercular ridge equal to one-third length of opercle. Pectoral cover plate with distinct median ridge and indistinct superior ridge. Nuchal ridge tri-lobed. Body ridges well developed but without sharp edges.

**COMPARISON.** Among the eight species of Atlantic American pipefishes that have the lateral trunk ridge continuous with the inferior tail ridge, two species only, i.e., *Ichthyocampus pawoneii* and *Pcnetopteryx nanus*, lack the lateral tail ridge. The remaining six species, including the four *Micrognathus*, have this ridge well developed. The seahorse pipefish, *Amphclikturus dendriticus*, as well as the true seahorses, *Hippocampus* species, can be identified by their prehensile tails. *Oostethus* and *Micrognathus* may be separated by the short tail of the former with number of rings being only 4–7 more than number of trunk rings; by contrast, *Micrognathus* has about twice as many tail rings as trunk rings. *Micrognathus dawsoni* has 30 dorsal fin rays, whereas the other three Atlantic American members of the genus have only 16–22 dorsal rays.

**COMMENTS.** In most pipefishes, the normal position of the anus is at the posterior end of the last trunk ring with the anal fin on the anterior end of the first tail ring. This relationship does not hold for *M. dawsoni*, since the anus is far enough forward on the anal ring so that there is room for the anal fin on the posterior portion of the ring. Hence to be thoroughly accurate in the ring counts they should be shown as  $17\frac{1}{2} + \frac{1}{2}35$ . This could be interpreted as  $18 + 35$  or  $17 + 36$ ; the writer prefers the latter.

Named in honor of C. E. Dawson, who collected and recognized this pipefish as different from the other Atlantic syngnathids.

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